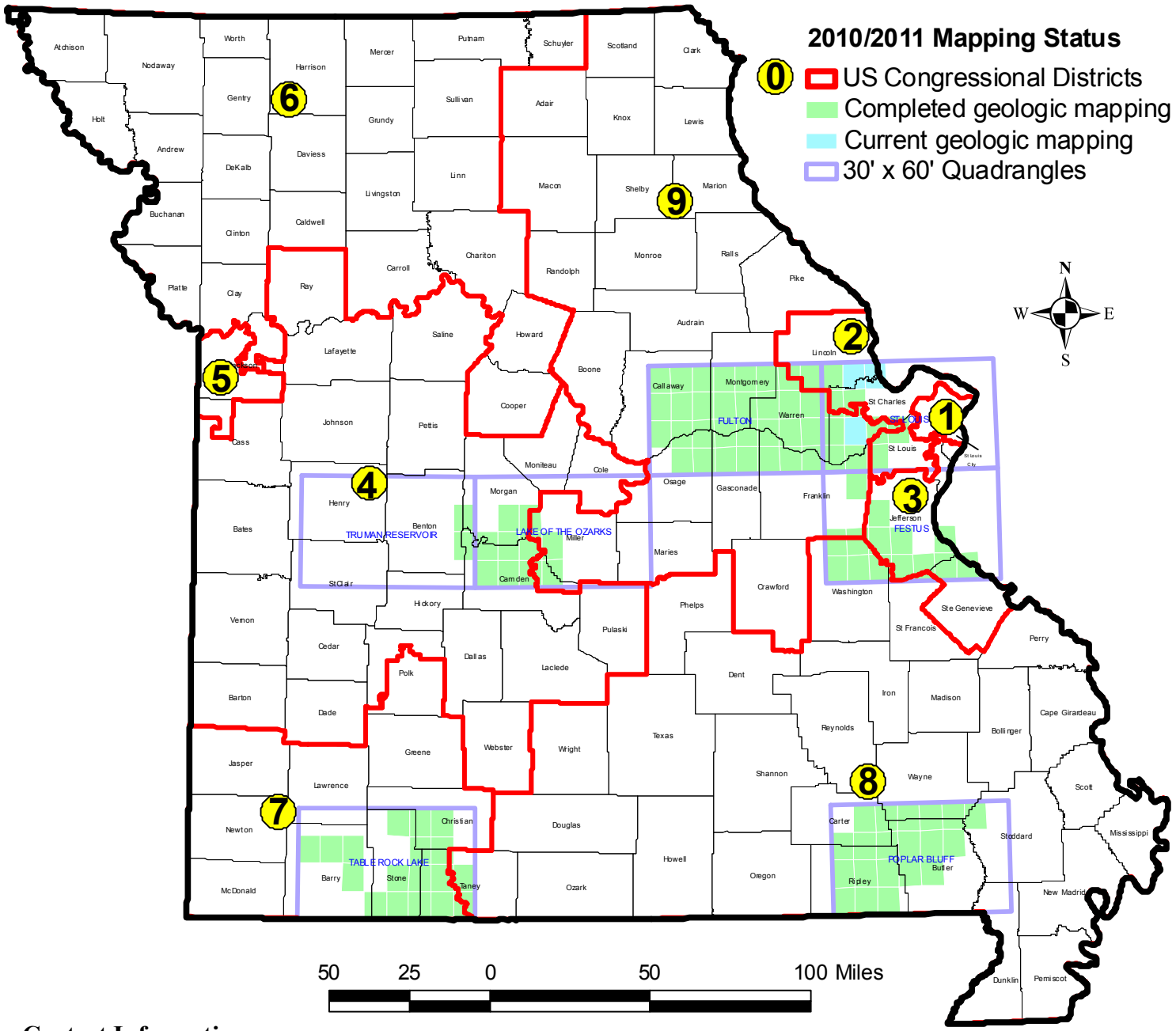
National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping

MISSOURI



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STATUS OF STATEMAP GEOLOGIC MAPPING PROGRAM IN MISSOURI 2010/2011

Year	Project Title	Federal Dollars	State Dollars	Project Dollars
93-98	**Table Rock Lake Mapping Project**: Purdy, McDowell, Lampe, Table Rock Dam, Viola, Garber, Reeds Spring, Branson, Hollister, Mincy, Forsyth, Shell Knob, Day, Highlandville, Hurley, Jenkins, Selmore and Spokane 7.5' quads	$ 319,395	$ 320,069	$ 639,464
98-00	**Poplar Bluff Mapping Project**: Briar, Doniphan North, Doniphan South, Ellsinore, Fairdealing, Flatwoods, Grandin, Grandin Southwest, Harviell, Hendrickson, Hogan Hollow, Hunter, Oxly, Poplar Bluff, Poynor, Puxico, Rombauer, Stringtown, Wappapello and Williamsville 7.5' quads **Table Rock Lake, Missouri, 30' x 60' quad compilation**	202,545	239,224	441,769
00-02	**Festus Mapping Project**: Bloomsdale, Cedar Hill, Cyclone Hollow, Danby, De Soto, Ebo, Fletcher, Gray Summit, Halifax, Old Mines, Richwoods, Selma, Tiff and Vineland 7.5' quads **Lake of the Ozarks Mapping Project**: Bagnell, Barnumton, Bollinger Creek, Camdenton, Green Bay Terrace, Lake Ozark, Sunrise Beach and Toronto 7.5' **Festus Digitizing Project**: Belew Creek, Festus, Herculaneum, House Springs, Lonedell, Maxville, Moselle, Oakville, Pacific, St. Clair and Valmeyer 7.5' quads **Springfield, Missouri, 30' x 60' quad compilation**	308,232	295,234	603,466
02-03	**Fulton Mapping Project**: Berger, Dissen, Fredericksburg, Gasconade, Hermann, Marthasville, Morrison, New Haven, Pershing, Swiss, Treloar and Washington West 7.5' quads **Lake of the Ozarks Mapping Project**: Boylers Mill, Gravois Mills, Knobby and Rocky Mount 7.5' quads	227,313	227,313	454,626
03-04	**Fulton Mapping Project** (bedrock and surficial material with drilling assistance): Foristell, New Melle, Troy, Washington East, Warrenton and Wright City 7.5' quads	255,220	272,070	527,290
04-05	**Fulton Mapping Project** (bedrock and surficial material with drilling assistance): Bellflower South, Hawk Point, Jonesburg, New Florence, Pinnacle Lake and Warrenton Northeast 7.5' quads	189,977	189,977	379,954
05-06	**Fulton Mapping Project** (bedrock mapping): Americus, Hawk Point, Montgomery City and Warrenton Northeast 7.5' quads; (surficial material mapping with drilling assistance): Americus and Montgomery City 7.5' quads **St. Louis Mapping Project** (surficial material mapping with existing data): Wentzville 7.5' quad	144,547	144,547	289,094
06-07	**Fulton Mapping Project** (bedrock and surficial material mapping): Fulton, Readsville and Williamsburg 7.5' quads	118,308	118,308	236,616
07-08	**Fulton Mapping Project** (bedrock and surficial material mapping): Calwood, Kingdom City and Reform; (bedrock only): Mokane East 7.5' quads	132,603	146,053	278,656
08-09	**Fulton Mapping Project** (bedrock and surficial mapping): Luystown and Mokane West quads; (surficial only): Mokane East 7.5' quad	104,451	107,799	212,250
09-10	**St. Louis Mapping Project** (bedrock and surficial mapping): Eureka and Labadie; (surficial only): Chesterfield; (bedrock only): Weldon Spring	133,590	134,740	268,330
10-11	**St. Louis Mapping Project** (bedrock and surficial mapping): Maryknoll; (bedrock only): Wentzville; (surficial only) Winfield and Defiance	124,754	132800	257,554
	TOTALS	$2,260,935	$2,328,134	$4,589,069

STATEMENT OF OUTCOME

The Missouri Division of Geology and Land Survey (DGLS) is an active participant in the STATEMAP component of the National Cooperative Geologic Mapping Program, having participated since STATEMAP's inception in 1993. Missouri recognizes the importance of geologic mapping as a tool for land-use planners, emergency-management officials, developers, environmental agencies, energy companies, mining companies, water-well drillers and many others who have need to understand the nature, composition and distribution of earth materials.

Several areas of rural Missouri have undergone rapid growth in recent years. The unique beauty of the Ozarks has drawn thousands of tourists and new homeowners to the Branson, Springfield and Lake of the Ozarks regions. The rapid development in these areas taxes natural resources and potentially impacts environmental quality. Geologic mapping identifies geologically sensitive areas, such as karst areas that could be particularly susceptible to groundwater contamination. It also identifies areas of high-quality groundwater resources to guide the installation of water wells and identifies potential mineral and aggregate resources to support economic development.

Geologic mapping has been focused in portions of southeast Missouri where geologic hazards are associated with the New Madrid Seismic Zone. Accurate geologic information is an essential tool in the preparation of earthquake-risk maps for use in the proper siting of new buildings, bridges, waste-disposal facilities and dams. Mapping in the Poplar Bluff and Festus areas has been completed to optimize safe growth and minimize risks from sinkhole collapse, liquefaction and landslides associated with earthquake hazards. Mapping on the St. Louis and Fulton project areas targets a region susceptible to geologic hazards and rapid population growth.

Since Missouri began its participation in the STATEMAP program, it has completed 102 bedrock and 95 surficial material maps at a scale of 1:24,000. During its fifteen-year involvement in the STATEMAP program, Missouri has received approximately $2,260,935 in federal dollars that were matched with additional state funds. With continued cooperative effort between the United States Geological Survey and the Missouri Department of Natural Resources, the state will have reliable geologic mapping information to assist decision makers with difficult resource choices and planning efforts.